

10/29/15 4:00 PM Senior Design Suite Meeting Minutes

4:03 - Dr Wolbrecht and Dr. Perry are here. They're examining the Twister and the head spring.

4:06 - Load that can be taken by the motor/foot plate

- How much can the bearings take?
- Statically and dynamically, so we know how much a person can weigh and how heavy the weights can be.

4:09 - DB37 (or actually the DB25)

- Sally found a USB converter cable, but the twister program is missing a .dll file when run on Sally's computer, and when she ran the new code, it's missing a different one.
- Probably a framework issue, might need to re-write libraries?
- Or find what the new libraries are called and switch them out
- Wherever it says "include x.dll" comment it out, and try and compile it
- Ask a CS friend for debugging help

4:13 - Circuit board in silver boxes

- It is possible to do it on a smaller package
- Could totally skip the box, since we're just collecting data.
- What goes into the digital/analog connections that used to connect to the DAQ?
- How do you send the signal to the motion monitor?

4:29 - Replace computer?

- Dr. Cohen thinks it's fine
- basically all we're doing is driving the motor and taking in some sensor data
- Can control the Twister using the computer
- We think we're good to get a new computer.

4:54 - Dr. Wolbrecht has some extra hardware

- A couple motors and a motor driver
- PCI cards have D/A converter (can sample at 1000 Hz) and can send signals to the motor driver which can also take in signals
- Thinks we could connect his existing hardware to matlab or simulink
- Arduino will be a little slower for DAQ

5:14 - Motor and tension

- Replace the cable with a timing belt, include a gear in the middle for tension on the belt